

EMPOWERMENT OF TAMBAK FARMERS GROUPS IN COMMUNITY ECONOMIC DEVELOPMENT IN THE VILLAGE PADANG SAKTI

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ABSTRACT

The problems faced by the pond farmer group partners are very complex, namely from the macro production aspect where the limitations of the shrimp cultivation technology applied are still very traditional, large areas of land but not yet properly utilized, expensive feed costs, lack of business capital, while at the micro level they are constrained by limitations in mastery. technology and shrimp cultivation process with the latest technology. The marketing management aspect is still traditional where the harvest is only sold in local markets and also to agents who buy directly from farms so that their sales turnover is not too large. Aspects of Business Management where the harvest results are not utilized properly in empowering the community's economy. The aim of implementing environmentally assisted village service activities in Padang Sakti Village, Muara Satu District is to find solutions to the problems faced by partners in empowering and developing the economy of the pond farmer group community. The approach method that will be used in providing solutions to problems faced by partners by providing knowledge is by providing training/counseling and mentoring with the use and application of good and correct shrimp farming management cultivation technology, correct marketing management by utilizing information technology to carry out online promotions so that harvest results can be distributed properly as well as providing training on processing pond products to make healthy food at economical prices which can empower the community's economic income. Based on the implementation of community service programs in environmentally assisted villages that have been implemented smoothly, the Meuhasae farmer group, Padang Sakti Village, Muara Satu District, is very enthusiastic in participating in training, mentoring and playing an active role in asking discussion questions or sharing knowledge with the material provided both in terms of management. aquaculture and from a marketing perspective. It is hoped that the results from the shrimp farming sector will improve and the harvest results will be able to help partners in increasing the income of the Partner group.

Keywords : *Development of Pond Farmers, Application of Technology, Community Economic Empowerment, Shrimp*

1. INTRODUCTION

Padang Sakti Village is one of the villages in Muara Satu District which is located not far from the Malikussaleh University Campus which is one of the villages supported by the Malikussaleh University Campus which is only about 500 m from the campus and only about 9 km from Lhokseumawe city center. The development of aquaculture businesses in Padang Sakti village is very prospective where Pertamina grants the right to use aquaculture land to the community to develop aquaculture businesses to empower business groups and as one of the sectors in increasing the economic income of the Padang Sakti village community. Padang Sakti Village consists of 4 hamlets consisting of Tgk Dipanyang Hamlet, Tgk Seumatang Hamlet, Cot Suwe Hamlet and

Utera Hamlet. One of the partners in this PKM activity is the "Meuhase" business group chaired by brother Mufrizal Putra Gunawan who comes from Tgk Hamlet. Displayed.

From the monitoring results of the proposing team, it shows that the potential for large areas of land owned by the village is very prospective if the land can be managed well, even though this land is owned by Pertamina, but the partners get use rights to run aquaculture businesses. Mitra has been in business for several years, but due to the lack of management of pond management and lack of business capital, the impact of the Covid 19 condition is still being felt, which is adding to the problems for pond farmers in continuing the survival of ponds, resulting in land conditions that are not well managed. The lack of knowledge and learning as well as the lack of use of technology in pond cultivation means that production results are still of poor quality. This can be seen where partners still use their five senses in monitoring the management of water quality, temperature, PH, oxygen levels and salinity of pond water, which should use measuring devices. Apart from the above, shrimp and fish cultivation managed by partners experiences difficulties in procuring superior seeds, expensive feed costs due to lack of funds and the application of good and correct cultivation technology, as well as marketing management which is still traditional. Farmers must promote their harvests in a more comprehensive way. online (Digital Marketing) so that the harvest results can be more optimal, don't sell to agents which causes the sales turnover not to be too large.

2. METHOD OF IMPLEMENTATION

The problems faced by partners are very complex, both macro and micro, namely as follows: macro production aspects starting from limited shrimp cultivation technology that is still very traditional, large areas of land that have not been properly exploited, expensive feed costs, lack of business capital while At a micro level, we are hampered by limitations in mastering technology and the process of cultivating shrimp with the latest technology. The marketing management aspect is still traditional where the harvest is only sold in local markets and also to agents who buy directly from farms so that their sales turnover is not too large. Aspects of Business Management where the harvest results are not utilized properly in empowering the community's economy.

Furthermore, the Communication and Cooperation process that is built with partners to resolve partner problems is initial communication with Gampong Padang Sakti government officials, then continued communication with partners, followed by holding a Focus Group Discussion (FGD) with Partners, and elements of Gampong Padang Sakti government leadership. Conduct field observations by getting to know the partners' environment directly to formulate the problems faced by partners and the solutions chosen. Together with partners to solve problems by prioritizing the stages of implementing activities. Therefore, efforts are needed to provide training and guidance so that partners are able to overcome the problems they face. The method for implementing training activities is as follows: 1). In the production aspect, it is necessary to improve the aquaculture management system properly and correctly by applying cultivation technology by improving the aquaculture facilities and infrastructure system, using water salinity measuring devices, using certified quality seeds, making natural feed, providing correct feed, monitoring growth, preventing pests and diseases so as to produce shrimp of good quality. 2). Marketing aspect by providing Marketing Management training through correct information technology in selling to consumers and introducing promotions and sales using online media so as to increase the income of farmers. 3). Business Management aspect by providing training on processing pond products to be used as a culinary business as a way of developing and empowering the community's economy.

The implementation of this service activity is planned for 3 (three) months with the implementation location being in Padang Sakti Village, Muara Satu District, Lhokseumawe City. Before shrimp cultivation management activities, partners will first be given knowledge in the form of counseling and learning about the problems faced by partners through several targeted programs.

First of all, pond management will be implemented with stages, namely education on the process and stages of modern shrimp cultivation, use of water sanitation measuring instruments, growing natural food to accelerate biota growth. introduction of pests and diseases, in the form of providing assistance for the procurement of shrimp fry, feed, fertilizer and medicines and fishing equipment. Next, there will be the application of modern breeding technology, in the form of training on making fermented feed, training on making pelleted feed from fish waste. In terms of improving marketing management, digital marketing training will be carried out, building a business network of farmers and traders as well as creating a website for the promotion and sale of pond products. The final stage will be to empower farmers, namely training in processing various foods from shrimp.

3. RESULTS

After this PKM activity was carried out from September to November 2023, the results achieved in this service were:

3.1 Production Management Aspects

In this empowerment activity, farmers are given skills and knowledge, as well as an understanding of good and correct aquaculture management processes (Guslan, 2016). Aquaculture management training and counseling by providing material both in theory and direct observation and practice on pond conditions so that pond farmers can easily understand the process of good and correct pond management will certainly have a good impact on shrimp life from the preparation process to post-harvest later. From the results of the PKM Team's monitoring, where previously the partners carried out traditional cultivation with this PKM activity which was sourced from PNPB funds, farmers gained a lot of knowledge, including those who previously only relied on their five senses in observing pond water, so now they understand how to use a soil pH meter. water salinity, as well as pond water temperature.



Figure 1. Aquaculture Management Training

Apart from that, the PKM Team also provides supporting data so that the PKM can run well by providing assistance in the form of shrimp fry, lime, poison, fertilizer (KCL & TSP), fishing tools, materials for making feed fermentation, materials for making pellets and others to Partners. As for the results of practical activities, partners are given knowledge with the following process stages: preparation of ponds, drying of pond bottom soil (October 03 - 4 2013), drying of pond bottom soil which is required, among others, as follows. Drying of pond soil is carried out until the soil is only stepped on. submerged about 1 cm. The soil is left until the bottom of the pond cracks. Pond construction repairs (October 5 – October 7 2023). The initial stage of pond preparation is improving the pond layout, which includes repairing bunds, repairing doors and filters, making caren (surround channels) and repairing leaks. (Siregar, 2017). Plots that have been eroded

(landslides or erosion) must be repaired. Leaks in embankments caused by crabs or other animals need to be covered. Doors that are already or somewhat damaged need to be repaired. At the door to the plot, a fine filter (nylon gauze or similar) is installed which functions to prevent the entry of wild fish or shrimp kept while the pond water is being regulated.

Liming of basic soil (09 – 11 October 2023). During cultivation, shrimp/fish require stable acidity conditions, namely pH 7 – 8 (Makmur et al., 2018). To restore soil acidity to this condition, liming is carried out because the accumulation and decomposition of organic material during previous cultivation lowers the soil pH. Liming also causes disease-carrying bacteria and fungi to die because it is difficult for them to survive at that pH. Liming with dolomite lime or tohor at a dose of 1 TON /ha or 10 kg/100 m². Pest and Disease Control (12-15 October 2023). Pests not only reduce production but also damage the pond ecology. The types of pests found in ponds are: Predatory pests, for example snapper fish, moonfish, keting fish, kipper fish, Sembilang fish, etc. Competing pests, for example mullet fish, tilapia fish, trisipan. Destructive pests, for example crabs and snakes. To eradicate the pests mentioned above, saponin can be given at a dose of 16 kg/ha. Giving saponin is done by soaking the saponin for 1-2 hours, after 2 hours the saponin is spread evenly in ponds filled with water at a height of 30 cm and then left for 4 days, after 4 days it is dried and washed again until the saponin is poisoned. is lost (Reni, 2020).

Fertilization (16-19 October 2023). Fertilization is intended to enrich the soil to stimulate the growth of phytoplankton. The types of fertilizer given are Urea (50 kg/ha) and TSP (50 kg/ha). The method for spreading fertilizer is to mix Urea and TSP fertilizer until evenly mixed after spreading it evenly in a pond that previously contained 10 – 30 cm of water. Fertilization can be continued several times and is done after 2 months of recovery (or depending on the fertility of the pond). The fertilizer used is Urea and TSP at a dose of 10 – 25 kg/ha and 15 kg/ha. When additional fertilization is carried out, the pond water level should not be more than 1 meter. Every time fertilization is carried out, the weather must be sunny (Arsad et al., 2017).

Making Fermented Feed (October 20 2023). Shrimp feed fermentation is a process used to improve the quality of shrimp by changing the composition of natural feed ingredients through the action of beneficial microorganisms. For fermented ingredient needs per hectare, 10 kg of rice bran is needed, 150 kg of bread yeast which has been soaked in fresh water and then left to rest for 48 hours without aeration (Syah et al., 2017). Water Filling and Salinity Measurement (October 23, 2023). The water used as a cultivation medium is sea water which is put into ponds using tides or pumps, and fresh water from rivers or irrigation canals. Before placing the fry into the pond, water quality parameters must first be measured, including temperature in the range of 26 - 28 oC, Ph 7-8 and salinity. For vannamei shrimp (*Litopenaeus vannamei*), pond conditions with a salinity of around 25-35 ppt (parts per thousand) are preferred. . The water used for shrimp life is classified as brackish water, if the turbidity is very high, it is necessary to change the water (Pratama et al., 2017).

Distribution and Acclimatization (26 October 2023). Good distribution of fry is the first step in shrimp cultivation. A good time to scatter the fry is in the morning or evening in the middle of the rainy season. At these times, the amount of water in the pond is sufficient so that the acid levels and toxic gases are oxidized. In this way the fry do not die. The correct distribution is from 6.00 to 7.00 in the morning when the air is still fresh and the temperature has not yet risen. The process of stocking the fry is carried out by acclimatization. The number of seeds that must be sown depends on the fertility of the pond and the level of management. Stocking density depends on courage, some are 70 birds/meter, some are 150 birds/meter which are cultivated intensively (Mangampa & Suwoyo, 2016).



Figure 2. Spreading of Fry by Acclimatization

Making Pellet Feed from fish waste (24 October 2023). Using fish waste to make pelleted feed is an effective way to reduce organic waste from the fishing industry. By recycling fish waste, we can reduce its negative impact on the environment. Making pellet feed from fish waste can be a good solution for recycling this waste and producing value-added products. Making shrimp pellet feed from fish waste can provide several significant benefits, both from an environmental and economic perspective. Fish waste content, especially less used parts such as bones and heads, can contain good nutrition for shrimp (Amri and Pi, 2013). The process of making pellet feed can help process fish waste into a form that is more easily digested and utilized by shrimp. By reducing organic waste, the use of fish waste for pelleted feed supports sustainable and environmentally friendly practices.

Using fish waste for feed production can provide new business opportunities and support the growth of the animal feed industry, including shrimp cultivation. This can create new jobs and contribute to the local economy. The first step in making pellets is to collect fish waste from fish processing or fish markets. Make sure this waste is clean from dangerous materials or other contaminants, then separate the parts that can be used from fish waste, such as skin, bones and parts of meat that can still be used, clean the five pieces of fish from contamination and other foreign materials such as stones, sand or other parts are useless. Boil the ingredients then dry them by drying them in the sun or oven. Then the material can be ground into a small size using a grinding machine or chusher. Then the material is processed into pellets using a machine. Then dry the newly formed pellets to reduce the water content and increase storage durability. After drying, the shrimp pellets can be packaged in packaging that is suitable for distribution and storage.

3.2 Marketing Management Aspects

In the Partner Marketing Aspect, namely the "Meuhase" farmer group, they were given training and assistance on Digital Marketing Management which was carried out on October 21 2023 at the Atakana café which is located at the intersection of Padang Sakti Village Line.(Engagement & Volume, 2023). The location was chosen because the location was easy for partners to reach and considering that this training requires an internet network so that partners can easily understand the education that will be delivered by the PKM Team. The training activity was guided by the Chair, Khairawati, SE, M.Si, assisted by PKM Team Members, namely Rahmaniar, SE, MSM who collaborated with Dr. Nurainun, SE, M.Sc explains the basic theory of Marketing Management and continues with an explanation of Digital Marketing in concept and

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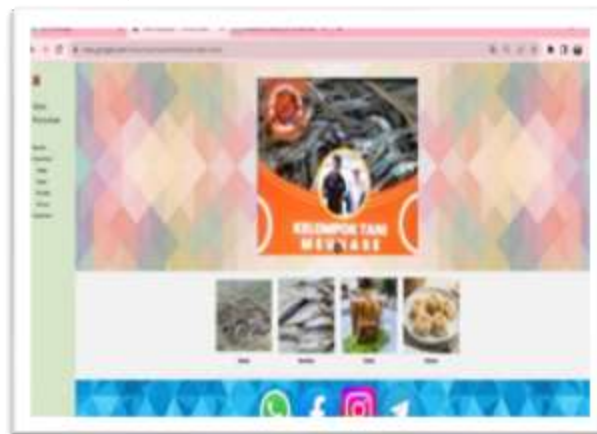
Khairawati, Wahyu Fuadi, Eva Ayuzar, Nurainun, Rahmانيar

implementation strategies in real life in the product sales process, namely partner group shrimp.(Nawir & Makassar, 2023).



Picture. 3. Marketing Training

Apart from the theoretical explanation, in practice, material was also delivered regarding one of the strategies in digital marketing, namely creating a website which was directly presented and guided by Wahyu Fuadi, ST, MIT who taught the farmers how to create a website to promote partner profiles, what product results were available. produced by partners and what media partners must have in promoting pond products(May & Nahakleky, 2022). The social media used in promotion via social media is via Facebook, WhatsApp and Instagram. This is done with the hope that consumers will get to know Mitra through a profile on the web that is easily accessible in the media. This will of course have an impact on increasing consumer demand for shrimp needs considering Padang Sakti village which is not far from Batuphat and Lhokseumawe markets which have many cafes and restaurants. who need shrimp as one of the dishes used as a menu in their cafes and restaurants(Azhar, 2022).



Picture. 4. Online Promotion Training

From a series of processes for implementing PKM Environmental Village Development activities, responses and support from partners and the community, namely: Partners are active in explaining all the problems faced and explaining the condition of the environment around partners. Partners are directly involved in determining solutions to the problems they face, in the fields of aquaculture management and marketing management. Partners are directly involved in making fermented feed and pelleted feed so this feed will certainly reduce operational costs. Partners and the community, as well as the PKM implementation team, jointly evaluate the ongoing process of

implementing activities, as well as provide input and suggestions so that in the future good communication and cooperation can continue to be established with partners and the community around the partner environment.

3.3 Influence and impact of Activities

The influence and impact of the PKM Environmental Village Development Scheme activities on partners are: Partners have understood the importance of pond management, in the shrimp cultivation process correctly and in a directed manner in accordance with the application of theory so that it can be applied directly to the ponds that will be empowered. Partners are accompanied and equipped with knowledge and insight in terms of marketing and promotional strategies. By creating a pond group website, sales will be carried out online so that consumers will easily place orders for shrimp, resulting in an increase in partner income compared to before where shrimp products were sold to agents who come directly to the pond when the harvest season arrives. It turns out that processed shrimp products can be used as culinary delights as a form of Small and Medium Enterprises (MSMEs) that can be carried out by farmers, which of course can have an impact on improving the community's economy.

The impact for the Faculty and Malikussaleh University itself is to increase lecturer publications from within the field of community service, news about PKM activities in electronic media, and add cooperation agreements to the Faculty which of course will have an impact on achieving IKU (Key Performance Indicators) with new partners in the field PKM. The impact for the Community Service implementation team itself is of course achieving the previously promised output targets, namely the publication of articles in the form of PKM publications in OJS journals, community service publications on electronic media, and obtaining Letters of Cooperation with PKM Partners, as well as PKM reports that can be used as as one of the points of lecturer performance burden.

4. CLOSING

4.1 Conclusion

The conclusion obtained based on the implementation of the community service program for the Community Development Village which has been implemented in Muara Satu District is that the fish farmers are very enthusiastic in participating in training, mentoring and play an active role in asking discussion questions or sharing knowledge with the material provided both in terms of farm management and from the marketing aspect. It is hoped that the results from the shrimp farming sector will improve and the harvest results will be able to help partners in increasing the income of the Partner group.

4.2 Acknowledgment

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